

Corbin Coal & Coke Company

REPORT

March 1st, 1913



The Corbin Coal
& Coke Company





Upper Portion of Town of Coelin, Shaving Tipples, and Grade to No. 3 Mine



Coal Mountain, Property of Coelin Coal & Coke Company



OR the information of the stockholders of the Corbin Coal & Coke Co., Limited, I have deemed it proper to issue a report embracing all matters of interest to them in connection with their property.

The report would have been issued at an earlier date, but I thought advisable to delay it until full title to all the Company's properties had been secured from the Government of

British Columbia.

Referring to my letter of February 8th, 1912, to Messrs. Day & Heaton, relative to the issue of \$600,000.00 Corbin Coal & Coke Co., Limited, stock, I beg to report that all of that stock has been sold at par, and with the proceeds the Company has:

Bought, cancelled and released from record, \$420,000.00 Eastern British Columbia Railway Co. first mortgage bonds, being all the bonds issued by that Company, at 105.....	\$441,000.00
Bought and paid for right-of-way and survey of Flathead Valley Railway.....	22,066.31
Secured the absolute fee of seven square miles of coal lands, and applied the balance towards construction of 8½ miles of standard gauge railroad to No. 3 mine.....	136,933.69
	<hr/> \$600,000.00

It was at first contemplated running a more direct line from Corbin to No. 3 mine—a distance of about 1¼ to 2 miles, but careful surveys, and taking into consideration the factor of safety in handling loaded trains, a change of plan to a switch back road was adopted, and 8½ miles were built and practically completed early in November, 1912. It was expected that this work might be finished by September 1st, but almost continuous heavy rains during the latter part of the summer and fall, and a great scarcity of labor delayed the work until winter came on, which explains why the operation of No. 3 mine has been delayed.

The snows of the past winter were unusually heavy, but we hope to have No. 3 mine uncovered and in condition to be taking coal from the surface workings of this mine by August of this year, and I have assurances from our Engineer that once in operation, winter snows will not hinder continuous work.

The cost of construction of the extension to No. 3 mine has been greater than was first anticipated, owing to the increased length of line, but I think it was fully justified by the increased safety and efficiency in the operation of the road, 3½ miles of

which is part of the Flathead Valley Railway, and located on its acquired right of way to the International Boundary, in the direction of Butte, Montana.

This increased cost, and the purchase of motive power and other machinery, amounted to about \$84,000.00, which amount has been borrowed and is the only debt of the Company.

The Company now owns in absolute fee, with Crown Grant title from the Government of British Columbia, twenty-four square miles of coal lands, considerable of which is covered with heavy timber; twenty-two miles of standard gauge railway laid with heavy rails; large terminals at McGillivray, B. C., at our connection with the Canadian Pacific Railway; 3 locomotives; 100 coal cars; passenger and freight cars; a plant at Corbin with complete equipment at No. 1 mine sufficient to handle 2,500 tons of coal daily; compressed air locomotives and coal cars; complete electric light plant; a water system with sufficient pressure to afford ample protection against fire, and houses for all its employees and their families.

This property, as shown by the accompanying map, is situated near the Crows Nest Division of the Canadian Pacific Railway in Eastern British Columbia, connection with which is made by the Coal Company's road, at McGillivray station, where this Company has large terminal grounds and ample yards and tracks for handling all business.

The Company's railway extends from McGillivray along the valley of the Michel River to the town of Corbin, which is centrally located on the Company's property. The Company has not parted with any of its ground and is in a position to absolutely control its surroundings.

There is little to add to Engineer Roberts' report as of November, 1911, except to say that the removal of a portion of the overburden from the coal of No. 3 mine confirms his conclusions in that report.

No. 1 mine has been operated with but little change, and the output has been reduced considerably on account of the difficulty in securing miners after the miners' strike in 1911. Mining operations have also been restricted somewhat awaiting rail connection with No. 3 mine and other coal properties of the Company, from which coal can be mined at much less cost, and therefore at a much better profit.

For the further information of stockholders I have attached to this report balance sheet as of March 1st, 1913, a copy of Engineer Roberts' report of November, 1911, and a copy of my letter to Messrs. Day & Heaton, of February 8th, 1912, together with photographs of coal mountain, showing the switch-back railway from Corbin to No. 3 mine, and others that may be of interest to stockholders.

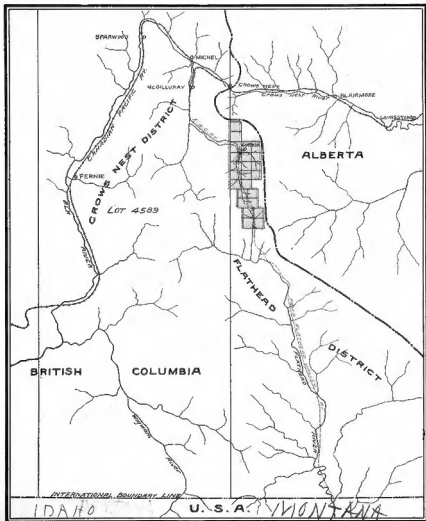
Respectfully submitted,
D. C. CORBIN, President.



Power House and Tipples, No. 1 Mine

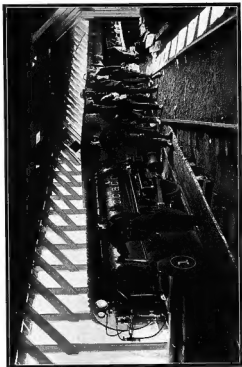
Map of Crows Nest and Flathead Districts
British Columbia

SHOWING PROPERTY OF THE CORBIN COAL & COKE CO.





Timeway to Tipple, Mine No. 1, and Miners' Houses



Portal to No. 1 Mine, with Train of Coal Cars



Boarding House Test, 30 x 60 Feet, Used During Construction of Road to No. 3 Mine,
the Floor of Which is Coal in Place



The Right of this Photograph Shows Coal in Place after Removal of Overburden—No. 3 Mine



Type of Locomotives Owned by This Company

CORBIN COAL & COKE COMPANY **BALANCE SHEET AND STATEMENT OF CONDITION AFTER CLOSING** **MARCH 1st, 1913**

CAPITAL ASSETS

Property Investment	
Lands and leases - - - - \$	5,850,000 00
Buildings, rolling stock and improvements - - -	227,320 34
Location and development costs, including payments on surface coal lands - - - - -	156,797 50
No. 3 mine development	5,705 14
	\$ 6,239,822 98

Other Investments

Eastern B. C. Ry.	\$ 840,000 00
F. V. Ry. Franchise - - -	22,066 31

Total Capital Assets - -

\$ 7,101,889 29

Working Assets

Materials and supplies on hand - - - - -	\$ 51,183 72
Accounts receivable - - - -	52,785 40
Cash on hand 3 1-13 - -	4,064 43
Special No. 3 construction account - -	59,841 14
Suspense—Deposit for consular fees - - - - -	75 00

Total working assets - -

167,949 69

Deferred Debit Items

Special No. 3 appropriation account	109,374 79
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\$ 7,379,213 77

CAPITAL LIABILITIES

Capital stock authorized	\$10,000,000 00
Capital stock unissued - -	3,000,000 00
Capital stock outstanding	\$ 7,000,000 00

Working Liabilities

Current accounts payable - - - - \$	19,919 91
E. B. C. Ry. bills payable - -	50,000 00
Unclaimed wages - - - - -	336 10

Total working liabilities

70,256 01

Balance—Profit and loss account	308,957 76
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\$ 7,379,213 77

Spokane, Wash., Feb'y 8th, 1912

Messrs. Day & Heaton,
80 Broadway, New York.

Sirs. The Corbin Coal & Coke Co., Limited, was organized under the laws of the State of Washington in 1907, with a paid in capital stock of \$1,000,000.00, which was used to acquire and develop an area of coal lands in the southeastern part of British Columbia in the heart of the Crow's Nest District, comprising seventeen square miles, of which six were owned in fee, and eleven by grants in perpetuity from the Government of British Columbia. After the property was acquired, the Eastern British Columbia Railway, fourteen miles in length, from McGillivray station on the Canadian Pacific Railway, to the coal mine, was constructed, and equipped with coal cars sufficient to handle 2,500 tons of coal daily, heavy motive power suitable for mountain grades, and all other necessary freight and passenger equipment, and \$420,000 in bonds were placed upon the railroad to cover the cost of construction and equipment.

In the first two years of the Company's life, Mine No. 1 was opened by a main working double track tunnel fourteen feet in width and driven in on the vein, which stands nearly perpendicular, a distance of about 2,200 feet. At 1,000 feet an up-raise of 600 feet was made to the surface, all in coal and cross cuts run at distances of about one hundred feet apart on the vein, which has proven it to be from fifty to two hundred feet wide.

In 1910 the Company increased its capital stock from \$1,000,000.00 to \$2,000,000.00, of which increase \$600,000.00 was subscribed for in cash at par. The remaining \$400,000.00 has not been issued and in the event the present capital is increased to \$10,000,000.00 the remaining \$400,000.00 will be cancelled. The \$600,000.00 cash was used to acquire in fee the eleven square miles formerly held under grant from the Government of British Columbia, and also to acquire Government grant for the seven square miles additional. The Company now owns seventeen square miles of coal lands in fee, and seven square miles under a lease or grant from the Government of British Columbia, for which lease or grant, as in the case of the eleven square miles above mentioned, a deed in fee simple will be obtained from the Government.

A considerable portion of the lands owned by the Company is covered by heavy timber, sufficient to furnish all timber required for mining and other company purposes for a very long period. Exploration work has proven that coal exists on nearly all of the land owned by the Company and indicates that the coal seams extend north and south a distance of eight to ten miles through the Company's property.

Mine No. 3, which has been known as the "Big Showing," is a continuation of Mine No. 1, and about a mile distant from the openings on the latter, and shows on the surface enormous deposits of high grade coal, analyzing from 64% to 68% fixed carbon. This body of coal has been developed by tunnels and a large number of pits sunk on the surface, and by extensive diamond drill work. It is covered by debris from two to ten feet in thickness, which will be removed by hydraulic washing and steam shovel. It is entirely feasible to uncover the coal in this manner and to extend the railroad tracks along the surface so as to load coal into cars by steam shovel, which will mean the elimination of skilled miners to a very great extent and thereby reduce the cost of putting coal on cars.

The Company proposes to increase its capital stock from \$2,000,000.00 to \$10,000,000.00. Of the additional stock, \$7,000,000.00 will be presently issued, \$6,400,000.00 to be distributed as a stock dividend to the holders of the present \$1,600,000.00 issued stock, four shares of new stock to be given in exchange for one share of present stock. This stock dividend is made to represent the actual value of the Company's lands and coal as shown by recent developments and operations. The balance of the proposed stock issue will be sold for cash at par. \$600,000.00

The proceeds thereof to be applied:

(1) To redeem all the outstanding \$420,000.00 Eastern British Columbia Railway Company 6% bonds above mentioned at 105	\$441,000.00
(2) To construct a spur railway to No. 3, three or four miles.....	
(3) To acquire the fee of seven (7) square miles of land now held under Government grant.....	
(4) To acquire charter (already granted) and rights of way necessary to construct a railroad from the Company's property through the Flathead Valley to the Montana Boundary.....	159,000.00
	<u>\$600,000.00</u>

The Company has at present a working capital of \$100,000.00

I estimate that the railway tracks can be extended to Mine No. 3 and the coal uncovered, ready for actual mining or quarrying, not later than August next. When coal can be put on cars at a cost that will insure a market for an output of 1,500 to 2,000 tons per day, showing a margin of profit sufficient to pay a dividend of 5% on the then outstanding \$7,000,000.00 stock from the first year's operation, and increasing additional dividends from year to year up to double that amount per annum. It is estimated that there is practically in sight, that can be mined in the manner above specified, between 4,000,000 and 5,000,000 tons, and there is probably much more than that.

The following is analysis of a sample of coal from the mines, collected at various openings and from surface showings, made by one of the best authorities in New York.

Moisture	1.02
Fixed Carbon.....	66.88
Volatile	23.86
Ash	7.98
Sulphur28
	<u>100.00</u>

Superintendent Roberts, as per his report heretofore furnished you, to which reference is hereby made, estimates that the veins now developed and being worked on the two square miles of land contain 50,000,000 tons of coal. Resident Superintendent Smith, who has direct charge at the mines, coincides with Mr Roberts, and from my own personal knowledge I believe their estimates are conservative, and in addition to this, as heretofore stated, our exploration work has developed coal on much of the other lands of the Company. The mines have not much water, and being worked by tunnel, drain themselves, and we have found them very free of gas. At present we are producing from No. 1 mine something like 600 tons daily, for which at present cost we find a ready market, and this output could be easily doubled.

The Company has never parted with a foot of ground, and at the town of Corbin, which is its headquarters, we have constructed and own all the necessary houses for housing miners, have a complete water system with 600-foot pressure, for fire protection, an electric light plant and all necessary power, power houses, tipples, etc., etc.

Of the proposed increase of capital to \$10,000,000.00 an issue of \$7,000,000.00 is authorized, and the remaining \$3,000,000.00 cannot be issued without the consent of a majority of all the stock.

The charter to construct the railroad through the Flathead Valley, which it is proposed to acquire, was granted in February, 1909, and I consider its acquisition by the Coal Company to be very important. It is the only charter in existence that has been granted for a road through the Flathead Valley, and it is against the policy of the Government to grant charters for parallel lines. The surveys and definite location of this line were made in 1909, maps of which are on file in the proper Government department in Victoria, B. C. The distance from the present terminus of the Eastern British Columbia Railway to the International Boundary is about fifty miles. The Flathead Valley Railway survey is in a direct line towards Butte, Montana, distance only 300 miles from our mines. All coke and bituminous coal, used in Butte is hauled more than twice as far as the distance between Corbin and Butte, and I am of the opinion that before very long Butte will get all its coke and bituminous coal from the Crow's Nest District.

Respectfully submitted,

D. C. CORBIN, President.

Report on Properties of the Corbin Coal & Coke Company

Property	The property of the Corbin Coal & Coke Company consists of twenty-four square miles of coal lands situated in the center of the Crows Nest coal fields of Southeastern British Columbia. It lies on the west slope of the main range of the Rocky Mountains at the headwaters of the south fork of Michel Creek, along which is constructed the Eastern British Columbia Railway, fourteen miles in length, connecting the coal properties with the Crows Nest branch of the Canadian Pacific Railway.
Railway Connection	
Development	Since the beginning of development work in 1908, all mining work has been confined to one square mile and on three seams only, although some prospecting has been done on several other seams that exist on the property.
Seam No. 1	The principal development has been done on No 1, which is a very large seam, standing nearly perpendicular and running north and south through the center of Coal Mountain. The work consists of driving a main working tunnel along the seam for a distance of about 2,000 feet into the mountain, cross-cutting the deposit, making up-raises to the surface and driving levels from these up-raises for the purpose of blocking out the coal within that section. The end of the tunnel is about 1,000 feet below the surface of the mountain.
Width of Vein	This seam varies in width from 50 to 200 feet and is opened up from the tunnel level to the surface. The continuity of the vein is proven by open pits on the surface and by diamond drill work.
Quantity	Judging from the amount of coal blocked out by the work to date, I figure that when the working tunnel is extended into the mountain 7,000 feet to a point below the last surface opening and diamond drill work, the amount of coal developed will be fully twenty-five million tons, without figuring any recovery of coal below the tunnel level, the floor of which is all in coal; and of this amount we have at least four million tons actually blocked out above the working tunnel.
System of Mining	Owing to the large size of the vein, the "Caving System" of mining has been used, working the coal from the top downwards, and I estimate that fully 80% of the workable coal can be mined.
Cost	Our previous work has shown that with a production of 1,000 tons a day this seam can be mined and put on the cars for not to exceed \$1.35 per ton.
Timber	Next to labor, the largest item of expense in cost of mining this large seam is the matter of timber, but as the property of the Company is heavily timbered, this supply can be furnished for the actual cost of cutting and transportation to the mine.
New Equipment	If all the coal from seam No. 1 should be marketed as "run-of-mine" the present equipment would be ample to handle future operations, but if the Company should decide to produce all sizes of coal for the market, there would be required a new tittle of the latest design to meet these requirements, and this equipment would probably cost \$50,000.00.

Seam No. 2 Seam No. 2 is a smaller vein of coking coal upon which but a limited amount of work has been done.

Seam No. 3 Seam No. 3, as far as can now be determined, runs parallel with Seam No. 1 for its entire length. The work on this seam consists of clearing the ground of heavy timber, removing the debris, running a cross-cut tunnel across the seam 270 feet in coal, and diamond drilling along and across the strike of the vein to determine as nearly as possible the extent and amount of coal available on ground proven to date. From the development done, I estimate that four and one-half million tons of coal can be mined by common day labor, without employing miners. The work would consist of simply removing the over-burden, which is ordinary mountain debris, and then quarrying out the coal. I see no reason why this seam should not produce as much coal as seam No. 1, within the same territory.

Facilities for Handling The work on seam No. 3 is over a mile from the railway terminus and a thousand feet above in elevation. There are under consideration two ways of handling this coal, and when either is installed, I figure the expense of stripping, mining and putting the coal on cars ready for market would be considerably less than 50 cents a ton.

Tramway One method under consideration consists of building an aerial bucket tramway from the coal deposit to some convenient point on Michel Creek, and a suitable tippie to properly handle the coal. The expense of installing a tramway with a capacity for handling one hundred tons an hour, building proper tippie, and extending the railway, would probably be about \$100,000.00.

Railway Extension An alternative proposition for handling the coal would be to extend a spur from the proposed Flathead Valley Railway to the coal deposit. This would cost, with proper tippie facilities at terminus, not far from \$125,000.00, and, all things considered, would probably be preferable.

As coal from seam No. 3 can be mined for considerable less than one-half what it costs to produce coal from seam No. 1, I suggest that the Company install such equipment as may be necessary to properly handle the coal and put it in the most marketable condition.

I estimate that with an average daily production from this seam of 2,400 tons, the profits would be \$3,000.00 daily, or over \$1,000,000.00 per year, and that the quantity of coal now proven in seam No. 3 would pay over \$5,000,000.00 in dividends.

Maps Accompanying this report, I hand you a map of the Company's holdings; also a map showing the vertical section through Coal Mountain, parallel with the workings on seams 1 and 3.

E. J. ROBERTS, Superintendent.

THE ROBERT RUPP
SPAW & WOODEN CO.
SPRINGFIELD, V. S. A.
1 2 3 4 5 6